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18 November 2019

Contact: *Justine Clarke*Telephone: *02 9865 2402*Our ref: *D2019/133365*

Naomi Moss Department of Planning, Industry & Environment 320 Pitt Street SYDNEY NSW 2001

Dear Ms Moss,

Exhibition comments - M12 Motorway - SSI 9364

Thank you for your email dated 15 October inviting WaterNSW to comment on the Environmental Impact Statement (EIS) for State Significant Infrastructure project (SSI 9634) M12 Motorway.

WaterNSW understands the M12 will connect the new Western Sydney Airport at Badgerys Creek with regional development centres, and broader Sydney. The M12 Motorway will be dual-carriageway, two lanes in each direction, with a central median allowing future expansion to six lanes. The motorway will cross WaterNSW owned land and significant water supply infrastructure, the Upper Canal, at Elizabeth Drive over the Cecil Hills water supply tunnel.

The Cecil Hills Tunnel segment of the Upper Canal passes beneath the proposed M12 and M7 Motorway interchange at the eastern extent of the M12 Motorway.

The Upper Canal corridor is a controlled area declared under the *Water NSW Act 2014* and its associated Regulation, as it is a critical component of Sydney's bulk water supply infrastructure and is also a State Heritage listed item.

It is important that during the detailed design, construction and on-going use of the motorway that there is no impact to the structural integrity of this WaterNSW asset and that it remains safe and serviceable at all times. Public access is prohibited unless a written access consent has been issued by WaterNSW.

A technical memorandum was prepared by the Jacobs Arcadis Joint Venture for RMS in November 2019 as part of the Concept Design work to confirm assumptions that the foundation load would not impose any significant additional stresses to the existing tunnel infrastructure. This memo demonstrates there would be negligible impacts from planned embankment and bridge foundation works required by the M12 project to the Upper Canal at Cecil Hills Tunnel.

A dilapidation survey was also conducted by RMS in May 2019 on the Cecil Hills Tunnel segment of the Upper Canal to inform the impact assessment.

There is potential for the road to impact on the Upper Canal if WaterNSW's requirements are not adequately implemented during the final design, construction and operational phases. However, WaterNSW acknowledge the ongoing consultation between the M12 project team and WaterNSW, and notes that the project team has incorporated mitigation measures in their design to address our concerns.

WaterNSW's specific concerns for the Upper Canal include:

- impacts of vibration on the fragile Cecil Hills Tunnel
- heritage impacts
- placement of batters and bridge piers
- water quality and drainage
- sediment and erosion control, and
- access impediments for operation and maintenance of the Upper Canal system.

Based on the information provided, WaterNSW has no objection to the proposed development, however requests the following be addressed in the Response to Submissions Report:

 How the project has considered if it will have a neutral or beneficial effect on the quality of water in the bulk water supply infrastructure, where it crosses the Upper Canal corridor in the Western Sydney Parklands.

This arises from requirements under Section 13 of State Environmental Planning Policy (Western Sydney Parklands) 2009. Other requirements under this section have been addressed in the EIS.

Requested conditions

WaterNSW requests that if the project is recommended for approval by the Minister, the approval includes conditions addressing the following:

- 1. Implementation of the mitigation measures as stated in the EIS.
- 2. Implementation of all practical measures to protect infrastructure within the Upper Canal Controlled Area, as required by WaterNSW.
- 3. Consultation with WaterNSW during detailed design for works near the Upper Canal corridor including:
 - a. placement of batters and bridge piers
 - b. access arrangements
 - c. stormwater runoff management and modelling
 - d. borehole depths and encasements to prevent cross contamination.
- 4. Consultation with WaterNSW during development of the Construction Environmental Management Plan (CEMP). The CEMP should include (but not be limited to):
 - a. measures to protect Upper Canal water supply infrastructure at Cecil Hills Tunnel and to enable WaterNSW to access this infrastructure at all times
 - b. reference to relevant measures outlined in the current 'Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines' (WaterNSW)
 - c. vibration monitoring
 - d. groundwater monitoring
 - e. water quality monitoring
 - f. stormwater runoff management
 - g. access provisions
 - h. erosion and sediment controls developed in accordance with the relevant requirements of Managing Urban Stormwater: Soils and Construction Volume 1: Blue Book (Landcom, 2004).
- 5. Consultation with WaterNSW during development of the Cultural Heritage Management Plan (CCHMP) prepared for the project as part of the CEMP.
- 6. During construction and operation, specific mitigation measures must be implemented over WaterNSW infrastructure to achieve the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).
- 7. Obtain from WaterNSW both a written consent and construction license to work within the Upper Canal corridor, prior to the commencement of construction.
- 8. Provide safe and unobstructed access for WaterNSW plant and personnel to access the Upper Canal corridor, 24 hours a day, 7 days a week.

- 9. Advise WaterNSW of any proposed amended or modified encroachment into the Upper Canal corridor.
- 10. Advise WaterNSW of any unexpected Heritage items found on WaterNSW land.
- 11. Notify any incidents that affect or could affect the Upper Canal corridor and its associated bulk water supply infrastructure to WaterNSW on the 24 hour Incident Notification Number 1800 061 069, as a matter of urgency.

WaterNSW requests the Department continue to notify us of all proposals with the potential to impact on WaterNSW land, assets or infrastructure. All correspondence should be directed to our email address Environmental. Assessments@waternsw.com.au.

If you have any questions regarding this letter, please contact Justine Clarke at justine.clarke@waternsw.com.au.

Yours sincerely

CLAY PRESHAW

Manager Catchment Protection